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(21)Application number : **62-253861**

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(54) SURFACE TREATMENT OF OPTICAL FIBER PREFORM

(57)Abstract:

PURPOSE: To obtain an optical fiber with improved transmission loss and mechanical strength by polishing the outer periphery of the optical fiber preform with a laser beam or a plasma flame under a positive pressure.

CONSTITUTION: The optical fiber preform 1 is allowed to pierce the insertion pipe 4 formed on the barrel part 3 of a positive-pressure vessel 2, rotated, and moved in the direction as shown by the arrow. A gaseous etchant is then supplied from supply nozzles 8 and 9 to make the pressure in the vessel 2 positive. A plated circuit current is impressed on an induction coil 7, and the outer periphery of the preform 1 is polished by the generated plasma flame or laser beam.

LEGAL STATUS

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